

# ANALYSIS OF ORIGINAL BILL

Franchise Tax Board

Author: Brulte and Peace, et al. Analyst: Roger Lackey Bill Number: SB 17XX

Related Bills: See Legislative History Telephone: 845-3627 Introduced Date: 05-17-2001

Attorney: Patrick Kusiak Sponsor: \_\_\_\_\_

**SUBJECT:** Solar Energy Credit

## SUMMARY

This bill would allow a credit for the purchase and installation of a solar energy system.

## PURPOSE OF THE BILL

The intent of this bill is to encourage the use of alternative energy sources to help resolve the state's energy crisis.

## EFFECTIVE/OPERATIVE DATE

As a tax levy, this bill would be effective immediately and would be operative for taxable years beginning on or after January 1, 2001, and before January 1, 2006.

## POSITION

Pending.

### Summary of Suggested Amendments

Department staff is available to work with the author's office to resolve the implementation considerations discussed below.

## ANALYSIS

### FEDERAL/STATE LAW

**Federal law** currently provides two energy-related credits: an energy credit that is one portion of the investment credit and a business credit for the production of electricity from certain renewable resources.

The energy investment credit is equal to 10% of the basis of energy property placed in service during the taxable year. Energy property includes equipment that uses solar energy to generate electricity, to heat or cool a structure, or to provide solar process heat. It also includes equipment that produces, distributes, or uses energy derived from geothermal deposits. The equipment also must meet performance and quality standards prescribed by federal regulations.

Board Position:

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Department Director

Date

Brian Putler

06/06/01

The business credit for the production of electricity from certain renewable resources is equal to 1.5 cents multiplied by the kilowatt hours of electricity produced by the taxpayer from qualified energy resources at a qualified facility. To qualify for the credit, the electricity is required to be sold to an unrelated person during the taxable year. Qualified energy resources include wind, closed-loop biomass, and poultry waste.

**Former state law** provided a credit equal to 10% of the cost of a solar energy system installed on premises located in California and used for commercial purposes. The credit was available for taxable or income years beginning on or after January 1, 1990, and before January 1, 1994.

The credit provisions defined “solar energy system” as solar, thermal, electric, and photovoltaic systems, but did not include devices that produced electricity through wind energy or energy conservation measures.

The former solar energy credit is further discussed in the PROGRAM BACKGROUND section of the analysis below.

**Current state law** does not provide a credit for solar energy systems.

### THIS BILL

This bill would allow a credit for the purchase and installation of a solar energy system installed on property in this state. The credit would be equal to the lesser of:

- 50% of the cost paid or incurred by the taxpayer during the taxable year.
- The applicable dollar amount per rated watt of the solar energy system.

“Applicable dollar amount” would mean \$2.50 for taxable years beginning on or after January 1, 2001, and before January 1, 2004, and \$1.25 for any taxable year beginning on or after January 1, 2004, and before January 1, 2006.

A “solar energy system” would be defined as solar energy devices with a peak generating capacity of at least 10 kilowatts and not more than 200 kilowatts. The system would have to be used solely for producing electricity. A “solar energy system” would be in the form of either a photovoltaic or wind-driven systems.

This bill would require the solar energy system to be used for the purpose of producing electricity primarily for the taxpayer’s own energy needs.

This bill would prohibit any taxpayer engaged in any type of utility business as described in the North American Industry Classification System Manual from claiming the credit.

This bill would prohibit any taxpayer who receives a grant, subsidy, credit, or other incentive from a municipal utility, or from any local, state, or federal government agency, for the purchase and installation of a solar energy system from claiming the credit. If a taxpayer is found to have received any of the fore mentioned benefits the credit would be recaptured.

This bill would not allow a deduction for any cost that a credit is allowed.

This bill would allow any excess credit to be carried over and used in the following eight years.

### IMPLEMENTATION CONCERNS

This bill would require the department, in consultation with the State Energy Commission, to make a certain determination. However, it is unclear whether the department would be determining the credit amount or the rated wattage of the solar energy system. The need for the department to make a determination regarding the amount of the credit is not apparent since the taxpayer would be able to calculate its credit amount, and the bill defines the applicable dollar amount. The department does not possess expertise regarding the rated watt capacity of solar energy systems. In addition, no reference standard is provided to establish the basis for making such a determination. This language needs clarification.

This bill would require that the solar energy system be “primarily used to meet the taxpayer’s own energy needs.” The concept of “primarily used to meet the taxpayer’s own energy needs” is undefined. Without definitions it would be difficult to determine whether a particular solar energy system complies with this requirement.

The terms “photovoltaic” and “wind-driven” are not defined.

A large number of taxpayers lease certain items of property rather than purchase them. As drafted, the bill would not apply to a taxpayer that leases a “solar energy system” for use in this state.

### LEGISLATIVE HISTORY

SBX 17 Brulte and Peace (2001/2002 first special session) is the identical first special session bill. SBX 17 died upon the close of the first special session.

ABX 79 and AB 872(Nakano, 2001/2002) would allow a solar energy credit. Both bills are at the Assembly Desk.

SBX 71 and SBXX 71 (Perata, 2001/2002), and ABX 27 and AB 1124 (Koretz, 2001/2002) would allow multiple credits and an accelerated depreciation deduction for the purchase of a power generation system. SBX 71 died upon the close of the first special session while SBXX 71 is at the Senate Desk. ABX 27 died upon the close of the first special session while AB 1124 is at the Assembly Desk.

ABX 15 (Rod Pacheco, 2001/2002) would allow a 100% credit for the purchase of energy conservation measures that reduce a taxpayer’s electricity and natural gas use by 5% from the previous taxable year and is in Assembly Revenue and Taxation Committee.

ABX 86 and AB 1264 (Campbell, 2001/2002) would allow a 75% credit for the purchase and installation of a solar energy system for residential purposes. Both of these bills are at the Assembly Desk.

AB 873 (Takasugi, 1997/1998) would have allowed a credit equal to 40% of the cost of energy conservation measures. The bill also would have allowed a second credit equal to 10% of the cost of a solar energy system installed on premises located in California and used for commercial purposes, subject to certain requirements. The bill failed to pass the Assembly Revenue and Taxation Committee.

## **PROGRAM BACKGROUND**

For taxable years 1990 through 1993, state law allowed a tax credit of 10% of the cost of a solar energy system installed on premises, used for commercial purposes that were located in California, and owned or leased by the taxpayer. The credit could not be claimed for any solar energy system with a generating capacity in excess of 30 megawatts for any taxable year unless the federal government provided at least a 10% federal credit for that solar energy system.

For 1987 and 1988 state law allowed a credit of 12% of the cost of commercial solar energy systems installed on commercial premises, cooperatives, apartment buildings, or other similar multiple dwellings.

From 1976 to 1988 state law allowed the solar energy tax credit for personal and commercial premises. The credit was refundable for modest income individual taxpayers until 1982 and was significantly modified several times. The credit was allowed as a percentage of the purchase and installation costs of solar energy systems on premises owned by the taxpayer. Except for taxpayers allowed a refund, any unused credit could be carried over indefinitely.

In 1987, the percentages allowed for the solar energy tax credit were 10% of the eligible costs for single-family dwellings, not to exceed a credit of \$1,000. For commercial property the percentage was 25% of the eligible costs.

## **OTHER STATES' INFORMATION**

The laws of these states were reviewed because their tax laws are similar to California's income tax laws.

*Massachusetts:* Currently has an energy credit that is equal to 15% of the net expenditures or \$1,000, whichever is less.

*New York:* For personal income tax only, New York allows a credit for solar generating equipment equal to 25% of certain solar generating expenditures. The credit is capped at \$3,700 per system.

*Michigan:* Does not allow an energy-related credit, but exempts the value of energy conservation devices from the local property tax.

*Oregon:* Currently has two energy credits, a personal income tax consumer energy purchases credit and a corporate tax credit for the costs of energy projects. The consumer energy purchases credit allows various credits ranging from \$50 to \$1,500 for consumer purchases of certain items. The corporate credit for the costs of energy projects is a credit equal to 35% of the incremental costs of the project involving energy conservation and other related projects.

## ECONOMIC IMPACT

### Revenue Estimate

Based on the discussion below, the revenue loss from this bill is as follows:

Impact of SBXX17 Introduced May 17, 2001 For Taxable Years Beginning 1/1/2001 Assumed Enactment After 6/30/01 Fiscal Year Impact (In Millions)		
2001-2	2002-3	2003-4
-\$3	-\$5	-\$5

The tax credit estimates above interact with rebate programs and assume adequate funding of the latter.

This analysis does not consider the possible changes in employment, personal income, or gross state product that could result from this proposal.

### Revenue Discussion

The impact of this bill would depend upon the number of individuals and businesses incurring qualifying solar energy expenses and the average credit applied against tax liabilities.

Based on information obtained from the California Energy Commission (CEC) and the California Public Utilities Commission (PUC), qualifying systems for their special rebate programs must be located within the electric utility service area of specific electric service providers and remain connected to the utility grid. For this estimate, assumptions were made that virtually all qualifying systems both photovoltaic and wind-driven qualifying for both the tax credit and the special rebate programs offered by the CEC and the PUC would file for the rebates as opposed to claiming the tax credit. This assumption is primarily based on the credit limitations and the timing of the benefit. For example, if a taxpayer files for the special rebates offered, which on average are equal to or greater than the tax credit, the taxpayer would receive full payment and would still be able to take advantage of the federal tax credit. Under the state tax credit a taxpayer would not be allowed to claim the federal tax credit, receive any special subsidy, and many would not receive the full tax benefit in the year of the credit due to limited tax liabilities. Also, because the state tax credit would reduce the taxpayer's state tax liability, and because state taxes paid is a deduction on federal tax returns, the benefit of the tax credit vis-à-vis a rebate would be further diluted.

It was further assumed that virtually all of the wind-driven systems would be connected to the grid, therefore qualifying for any special rebate program.

For this analysis assumptions were made that approximately 10% of qualifying systems meeting the capacity requirements of this bill would file for the tax credit, of which the majority currently would not qualify for special rebate programs. Projected volumes were based on the California Energy Commission's projected rebate program.

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